



**Social Determinants of Health –  
Can Home Visiting Programs Improve Outcomes?**

Home Visiting Conference  
October 29, 2013

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## Objectives

- 
- Define the social determinants of health and how this relates to home visiting programs
  - Describe the effect of toxic stress and adverse childhood experiences on lifelong health
  - Explain the health consequences of violence victimization
  - Describe the effectiveness of home visitation programs in the context of violence prevention

## Social Determinants of Health

- The conditions in which people are
  - Born
  - Grow
  - Live
  - Work
  - Age
- Shaped by the distribution of
  - Money
  - Power
  - Resources

CDC 2013; WHO 2013

## Social Determinants of Health

- Biologic/Genetic
  - Sex and Age
- Individual Behavior
  - Smoking, excessive drinking, substance abuse, poor diet and physical inactivity are among the leader contributors to **preventable** death in the US
- Social Environment
  - Discrimination, income and gender
- Physical Environment
  - Where a person lives, crowding conditions, lack of green space
- Health Services
  - Access to quality health care, having insurance

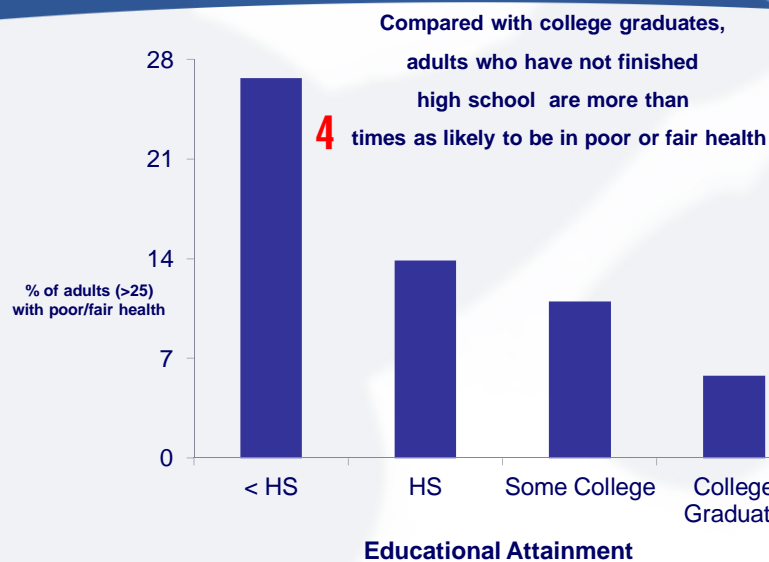
CDC 2013; Mokdad 2004; WHO 2013

## Social Determinants of Health

- A nation's health is its most precious asset
- A person's health is not only a product of good medical care and genes
- A person's health and likelihood of becoming sick and dying prematurely are influenced by
  - Education

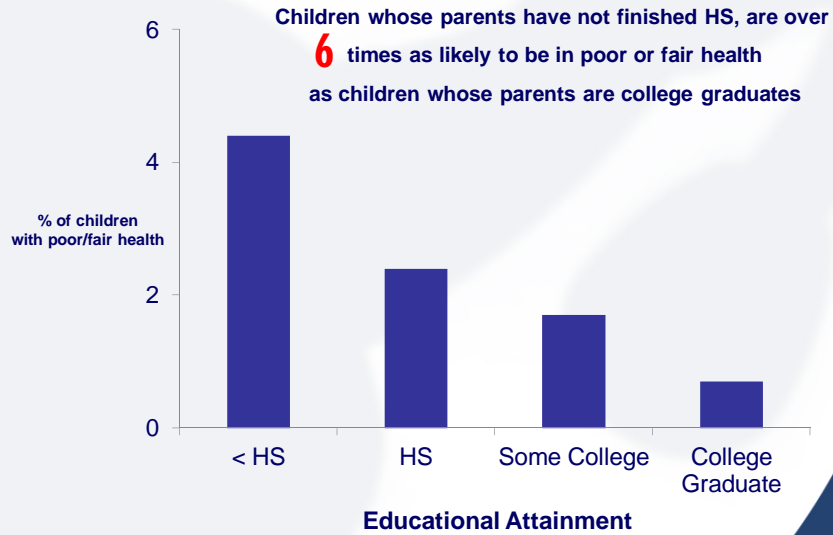
RWJF 2008

## Education and Adult Health



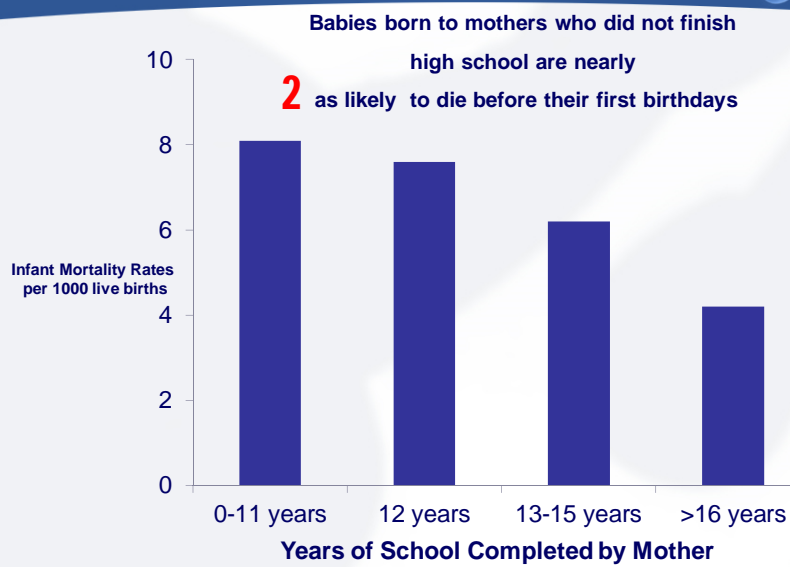
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## Education and Children's Health



RWJF 2008

## Education and Children's Health



RWJF 2008

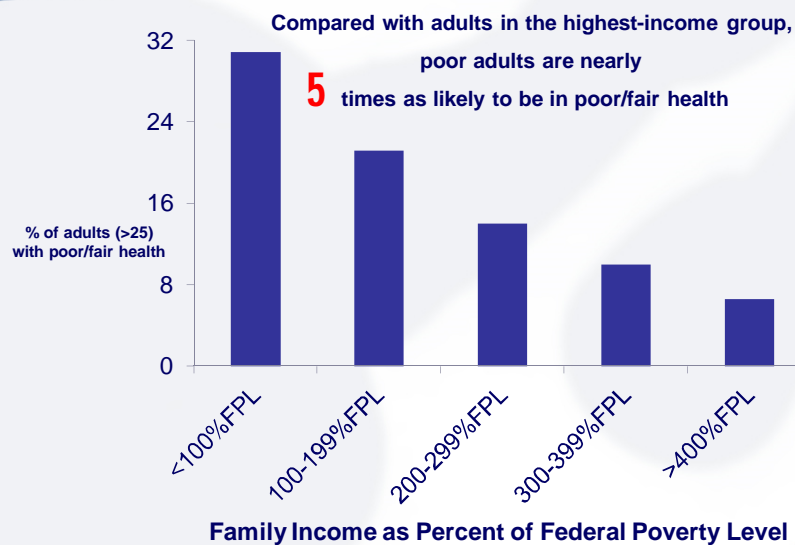


## Social Determinants of Health

- A nation's health is its most precious asset
- A person's health is not only a product of good medical care and genes
- A person's health and likelihood of becoming sick and dying prematurely are influenced by
  - Education
  - Income

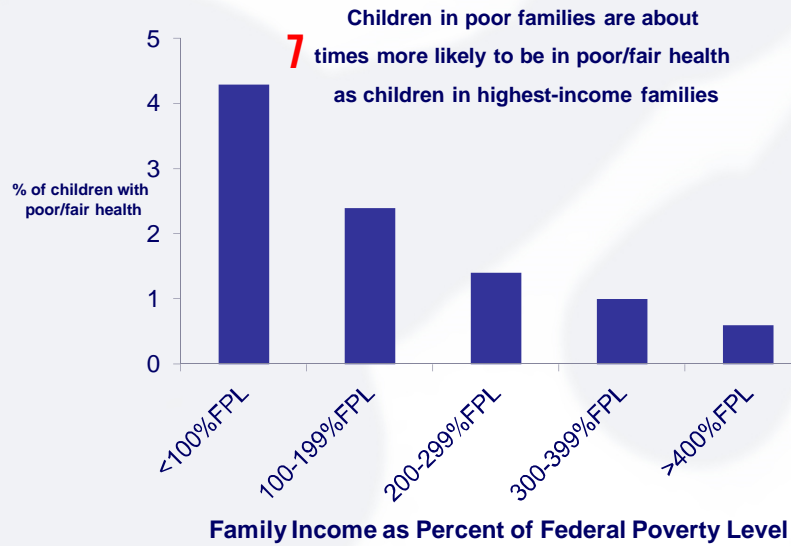
RWJF 2008

## Income and Adult Health



RWJF 2008

## Income and Children's Health



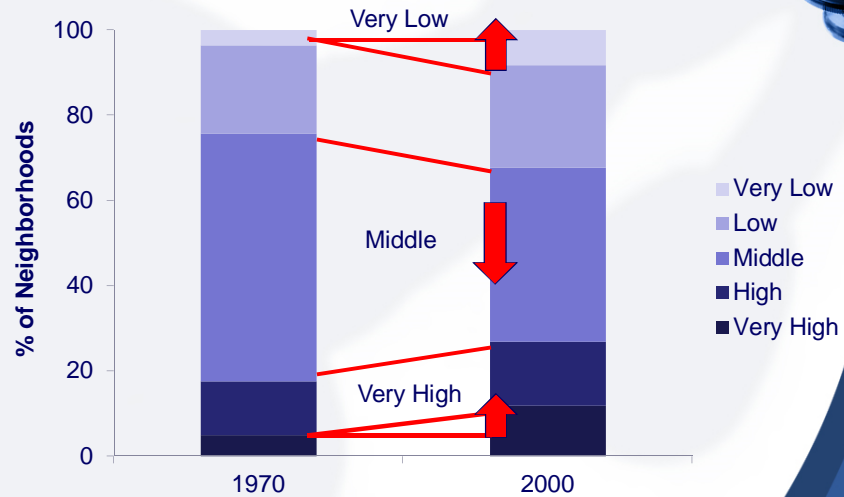
RWJF 2008

## Social Determinants of Health

- A nation's health is its most precious asset
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- A person's health and likelihood of becoming sick and dying prematurely are influenced by
  - Education
  - Income
  - Quality of neighborhoods

RWJF 2008

## Neighborhood Income



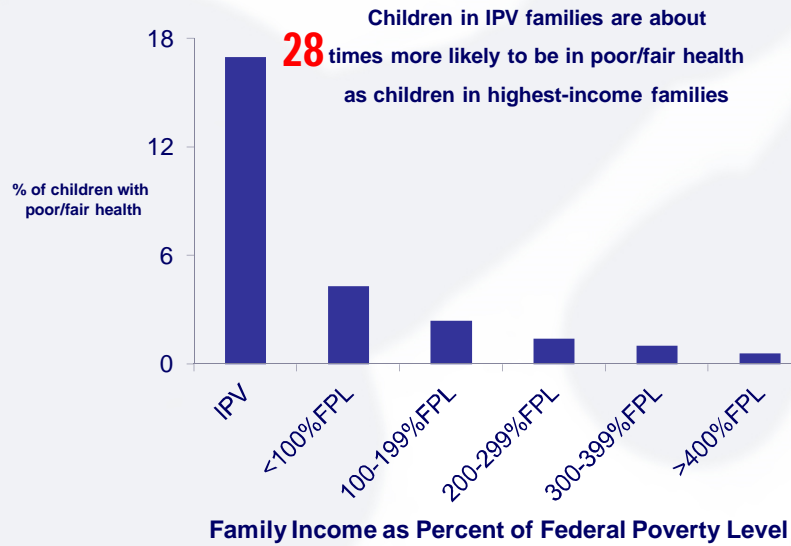
RWJF 2008

## Social Determinants of Health

- A nation's health is its most precious asset
- A person's health is not only a product of good medical care and genes
- A person's health and likelihood of becoming sick and dying prematurely are influenced by
  - Education
  - Income
  - Quality of neighborhoods
  - Violence exposure and victimization

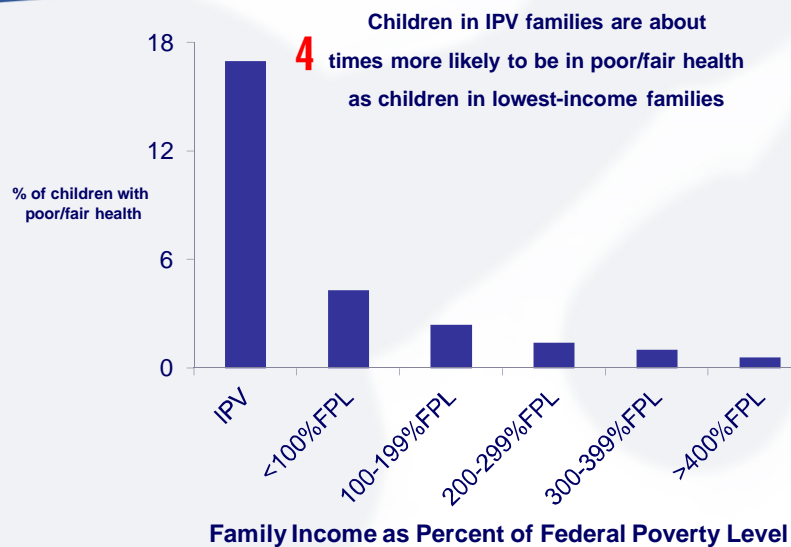
RWJF 2008

## IPV and Children's Health



Franchek-Roa unpublished; RWJF 2008

## IPV and Children's Health



Franchek-Roa unpublished; RWJF 2008

## Social Determinants of Health

- Reducing health inequalities can benefit ALL Americans
- *Perhaps the most important reason to act now is the shared American ideal of fair opportunity for all to pursue life, liberty and happiness—all of which depend on good health.* Robert Wood Johnson Foundation
- Home visiting programs offer a mechanism for ensuring that at-risk families have social support, linkage with public and private community services and ongoing health services, and development and safety education

Council on Community Pediatrics 2009; RWJF 2008; Segal 2012

## Objectives

- Define the social determinants of health and how this relates to home visiting programs
  - *The connection between health and the dwelling of the population is one of the most important that exists.*
    - » Florence Nightingale

## Objectives

- Define the social determinants of health and how this relates to home visiting programs
- Describe the effect of toxic stress and adverse childhood experiences on lifelong health

## Adverse Childhood Experiences

Vincent J Felitti MD

Obesity is not the problem – ***it is the solution***

## Adverse Childhood Experiences

- ACE study documents the conversion of traumatic emotional experiences in childhood into organic disease later in life

Felitti 2001

**How does this happen, this reverse alchemy,  
turning the gold of a newborn  
into the lead of a depressed, diseased adult?**

Felitti 2001

## Adverse Childhood Experiences

ACE	Felitti 1998 (%)	Utah 2010 (%)
Psychological Abuse	11	38
Physical Abuse	11	17
Sexual Abuse	22	19
Substance Abuse	26	28
Mental Illness	19	21
Mother Treated Violently	13	12
Criminal Behavior	3	6

Felitti 1998; No More Secrets 2013; [http://health.utah.gov/opa/publications/hsu/11Jul\\_ACE.pdf](http://health.utah.gov/opa/publications/hsu/11Jul_ACE.pdf)

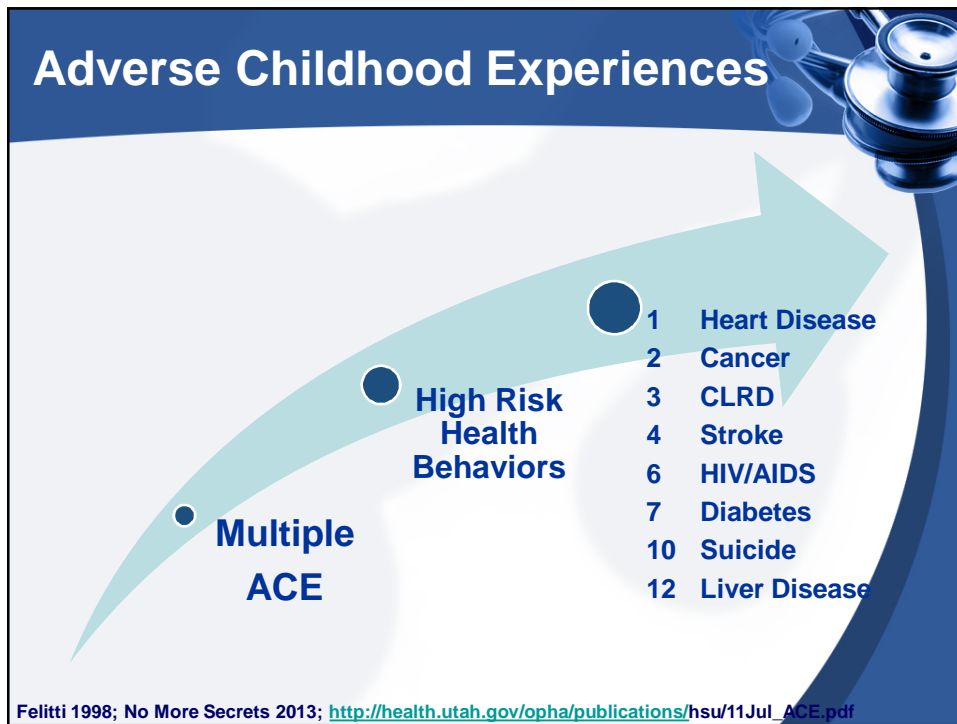
## Adverse Childhood Experiences

ACE SCORE	Felitti 1998 (%)	Utah 2010 (%)
0	50	41
1-3	44	(1-4) 49
≥4	6	(≥5) 10

Felitti 1998; No More Secrets 2013; [http://health.utah.gov/opa/publications/hsu/11Jul\\_ACE.pdf](http://health.utah.gov/opa/publications/hsu/11Jul_ACE.pdf)



## Adverse Childhood Experiences



## Trauma-Informed Care

- Realization that many patients seeking behavior services and many other public health services have a history of physical and sexual abuse and other forms of trauma
- Trauma-informed care approach to patients provides a more therapeutic interaction and avoids re-traumatization
- ~~“What is wrong with you?”~~
- “What has happened to you?”

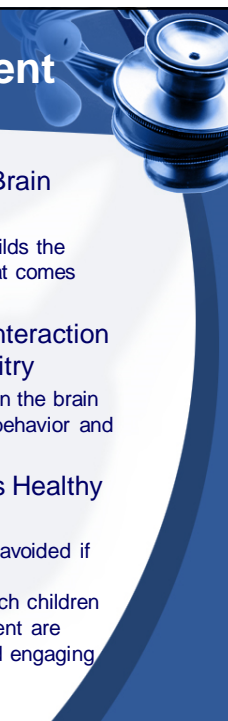
<http://www.samhsa.gov/ncitc/trauma.asp>



[http://www.youtube.com/watch?feature=player\\_embedded&v=VNNsN9lJkws](http://www.youtube.com/watch?feature=player_embedded&v=VNNsN9lJkws)

[http://www.youtube.com/watch?feature=player\\_embedded&v=m\\_5u8-QSh6A](http://www.youtube.com/watch?feature=player_embedded&v=m_5u8-QSh6A)

[http://www.youtube.com/watch?feature=player\\_embedded&v=rVwFkcOZHJw](http://www.youtube.com/watch?feature=player_embedded&v=rVwFkcOZHJw)



## Core Concepts of Child Development

1. Experiences Build Brain Architecture
  - What comes first builds the foundation for all that comes later
2. Serve and Return Interaction Shapes Brain Circuitry
  - builds a foundation in the brain for all the learning, behavior and health that follow
3. Toxic Stress Derails Healthy Development
  - Toxic stress can be avoided if we ensure that the environments in which children grow and development are nurturing, stable and engaging

[www.developingchild.harvard.edu](http://www.developingchild.harvard.edu)

## Felitti commentary

*"...the need is clear,  
the opportunities are  
major...what  
happens in  
childhood...  
commonly lasts  
throughout life*

*Time does not heal;  
time conceals*

*...The impact of a  
successful approach  
here might be as  
great as that of a  
major vaccine."*

Felitti 2009; Flaherty 2009

## Objectives

- Define the social determinants of health and how this relates to home visiting programs
- Describe the effect of toxic stress and adverse childhood experiences on lifelong health
  - Many adult diseases should be viewed as developmental disorders that begin early in life

Shonkoff 2012

## Objectives

- Define the social determinants of health and how this relates to home visiting programs
- Describe the effect of toxic stress and adverse childhood experiences on lifelong health
- Explain the health consequences of violence victimization

## What is IPV?

- Intimate partner violence is a pattern of "...coercive behaviors that may include inflicted physical injury, psychological abuse, sexual assault, progressive social isolation, stalking, deprivation, intimidation and threats."

FVPF 1999

## What is IPV?

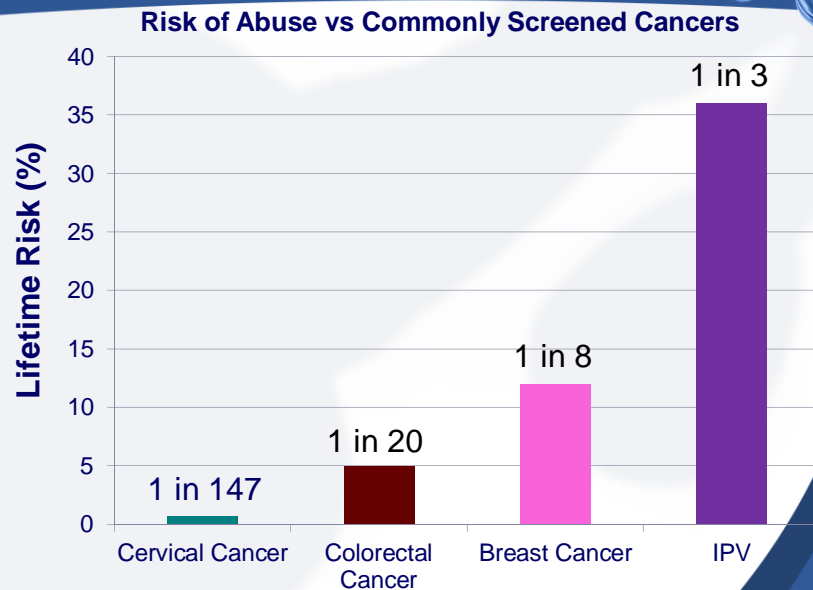
- “These behaviors are perpetrated by someone who is, was or wishes to be involved in an intimate or dating relationship with an adult or adolescent victim and are aimed at establishing control of one partner over the other.”

FVPF 1999

## How common is IPV?

- The importance of routine screening for breast, cervical, and colorectal cancer is well recognized

## How common is IPV?



## How common in IPV?

### • IPV Homicides

- **Worldwide**: **38%** of female homicides are committed by an intimate partner
- **US**: **30%** of female homicides are committed by an intimate partner
- **Utah**: **42%** of female homicides are committed by an intimate partner

Dan Jones 2005; No More Secrets 2013; Rees 2006; [www.sltrib.com](http://www.sltrib.com)

## Healthy People 2020

- Research has linked IPV to ALL of the leading health indicators defined in the Healthy People 2020 Health Initiative
  - Access to health services
  - Clinical preventive services
  - Environmental quality
  - Injury and Violence
  - Maternal/Infant/Child Health
  - Mental health
  - Nutrition/Physical activity/Obesity
  - Reproductive/Sexual health
  - Social determinants of health
  - Substance abuse
  - Tobacco use

## IPV is a Medical Issue Reproductive Coercion

- Involves behaviors that a partner uses to maintain power and control in a relationship related to reproductive health
  - Attempts to impregnate a partner against her will
  - Controlling the outcomes of a pregnancy
  - Coercing a partner to engage in unwanted sexual acts
  - Threats of violence if a person does not agree to sex
  - Forced noncondom use
  - Intentionally exposing a partner to STD/HIV
  - Birth control sabotage

Chamberlain 2010; Coker 2007; Hess 2012; Miller 2007, 2010; Stockman 2013; Swan 2012

## IPV is a Medical Issue

### Maternal Health Consequences

- Late prenatal care
- Poor weight gain
- Spontaneous abortion
- Preterm labor
- HTN disorders
- Vaginal bleeding
- Placenta abruption
- Severe nausea/vomiting
- Premature ROM
- **Homicide**

ACOG 2012; AVA AVA 2009; Cheng 2010; Martin 2012; Zolotor 2009

## IPV is a Medical Issue

### Fetal Health Effects

- Low birth weight
- Prematurity
- Perinatal death

Zolotor 2009



## IPV is a Medical Issue

### Health Consequences

- Physical injury
- Strangulation
- Mental Illness
- Neurologic
- Cardiovascular
- Gastrointestinal
- Muscle/Joint Disease
- Pulmonary
- Chronic Pain Syndromes
- Health Risk Behaviors

AVA COLEVA 2009; Zolotor 2009

## IPV is a Medical Issue

### *The Special Case of Traumatic Brain Injury*

- Acute Symptoms
  - Feeling dazed/confused
  - Memory/concentration problems
  - Headache
  - Dizziness
  - Nausea/vomiting
  - Sensory distortions
  - Sensitivity to light/sound
  - Mood changes/swings
  - Feeling depressed/anxious

## IPV is a Medical Issue

### *The Special Case of Traumatic Brain Injury*

- Long-term Consequences
  - Difficulty with memory
  - Thinking is slower
  - Confusion
  - Difficulty switching from one activity to another
  - Difficulty with abstract thoughts
  - Word-finding problems
  - Executive function impairment

## IPV is a Medical Issue

### *The Special Case of PTSD*

- Re-experiencing symptoms
  - Reliving the trauma
  - Intrusive thoughts
- Avoidant symptoms
  - Disconnected
  - Reduced interest
- Increased arousal symptoms
  - Irritability/anger
  - Easily startled

## IPV is a Pediatric Issue

### Health Consequences to Child Witnesses

- Sustain injuries
- Sleep problems
- Behavioral issues
- Psychosomatic complaints
- School failure
- PTSD
  - Conduct disorders
  - Mood disorders
  - Anxiety
  - ADHD

Carter 1999; Christian 1997; Edelson 2003; Lehman 1997; McCloskey 2000; Schechter 1995; Zink 2003

## IPV is a Medical Issue

### Health Consequences to Child Witnesses

Child witnesses  
are more likely  
to incorporate  
violence into  
their lives and  
relationships

## Objectives

- Define the social determinants of health and how this relates to home visiting programs
- Describe the effect of toxic stress and adverse childhood experiences on lifelong health
- Explain the health consequences of violence victimization
  - *If you don't ask—they won't tell*

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## The Special Case of IPV

- Perinatal home visitation programs
  - None were designed to address IPV
  - Programs that screened for IPV found past year prevalence rates as high as **52%**
  - The presence of IPV limited the ability of the intervention to improve maternal and child outcomes

Sharp 2008

## The Special Case of IPV

- Hawaii's Healthy Start
  - Lower rates of maternal victimization (not statistically significant) and significantly lower rates of female perpetration
- Project SUPPORT
  - Less behavior problems in children
  - Mothers were less likely to return to their abusive partners
- DOVE Program
  - Still in progress
- Enhanced Nurse Family Partnership Study
  - The program seemed to work as intended for primary prevention approach but does not work for those already experiencing or engaged in IPV

Bair-Merritt 2010; Kilburn 2008; McDonald 2006; Niolon 2013 Abstract

## Task Force on Community Preventive Services

- Early childhood home visitation programs
  - Recommended to prevent
    - Child maltreatment
  - Insufficient evidence to prevent
    - Intimate partner violence
    - Violence by parents
    - Violence by children

Bilukha 2005; [www.communityguide.org/violence/home/index.html](http://www.communityguide.org/violence/home/index.html)

## The Special Case of IPV

- Realizing the Promise of Home Visitation
  - Integrate IPV identification assessment and prevention into all aspects of home visitation training and service delivery
  - Connect mothers and children who experience or are at risk of experiencing IPV with available community-based resources
  - Educate parents about the potentially harmful effects of exposure to IPV on children and how parents' own exposure to violence can influence their parenting both positively and negatively
  - Engage fathers and other men, when safe to do so, in effective strategies to create healthy relationships with their partners and children while continuing to hold them accountable when they use violence

Family Violence Prevention Fund 2010



## In Summary

- Define the social determinants of health and how this relates to home visiting programs
  - *“...the most efficient strategy for strengthening the future workforce both economically and neurobiologically, and improving its quality of life is to invest in the environments of disadvantaged children during the early childhood years.”*  
–Knudsen 2006 (Nobel Laureate Economist)

## In Summary

- Define the social determinants of health and how this relates to home visiting programs
- Describe the effect of toxic stress and adverse childhood experiences on lifelong health
  - *“It is easier to build strong children than to repair broken men.”—Frederick Douglass*

## In Summary

- Define the social determinants of health and how this relates to home visiting programs
- Describe the effect of toxic stress and adverse childhood experiences on lifelong health
- Explain the health consequences of violence victimization
  - *“I will remember that there is an art to medicine as well as a science, and that warmth, sympathy, and understanding may outweigh the surgeon’s knife or the chemist’s drug.”  
— Louis Lasagna MD*



## In Summary

- Define the social determinants of health and how this relates to home visiting programs
- Describe the effect of toxic stress and adverse childhood experiences on lifelong health
- Explain the health consequences of violence victimization
- Describe the effectiveness of home visitation programs in the context of violence prevention
  - Strong families start with a strong foundation Pew Charitable Trust

A graphic featuring a blue stethoscope in the upper left corner and a faint, light blue handprint in the background. The text "Thank You" is positioned in the lower right area of the slide.

**Thank You**



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